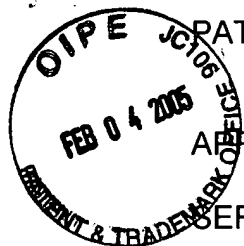


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PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Bennett

EXAMINER: Cumming, W.

SERIAL NO.: 09/096,560

GROUP: 2749

FILED: 6/12/98

CASE NO.: AMT-9713

ENTITLED: Home Security and Automation Features for a Home Gateway

Law Offices of Dale B. Halling
24 S. Weber, Suite 311
Colorado Springs, CO 80903
February 1, 2005

Request for Reinstatement of the Appeal

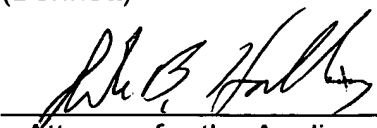
Honorable Commissioner of
Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated November 20, 2004, the applicants hereby ask that the appeal be reinstated. A Supplemental Appeal Brief is attached.

Respectfully submitted,
(Bennett)

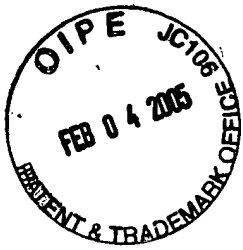
By


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I hereby certify that a Response is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450, on:

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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPLICANT(S): Bennett et al. EXAMINER: Cumming, W.

SERIAL NO.: 09/096,560 ART GROUP: 2749

FILED: 6/12/98 Case No.: AMT-9713

ENTITLED: Home Gateway System for Home Automation and Security

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Date of Deposit

Dale B. Halling
Attorney of Record


Signature

SUPPLEMENTAL APPEAL BRIEF

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

This is an appeal from the rejection of claims 1-19 of the Office Action dated November 30, 2004. This application was filed on June 12, 1998. Appellant submits this Appeal Brief pursuant to 35 U.S.C. §134 and 37 C.F.R. § 1.191 in furtherance of the Notice of Appeal filed in this case on April 5, 2000 which was incorrectly abandoned by the Patent Office. The fees required under 37 C.F.R. §1.17(b) were filed with the original Appeal brief.

I. Real Party In Interest

The real party in interest is: Ameritech Corporation, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 2000 West Ameritech Center Drive, Hoffman Estates, Illinois, 60196-1025 See the Assignment recorded at Reel 9402, Frame 0643.

II. Related Appeals And Interferences

There are no appeals or interferences related to the present appeal.

III. Status Of Claims

Claims 1-19 (see Appendix) are pending in this application. Claims 1-19 are rejected and are involved in this appeal.

IV. Status Of Amendments

There have been no amendments filed subsequent to the final rejection of August 2, 2001 and the rejection dated November 30, 2004.

V. Summary Of The Invention

Wireless Local Loop (WLL) technology requires a "box" or home gateway at the premises unlike POTS (Plain Old Telephone Service) technology. Unfortunately, there has been little thought on how to integrate home gateway systems to maximize the technology and reduce the duplication of components.

The invention is an integration of telephony, communication, security and home automation functions into a single, cost effective package. The home gateway system 20 (See Figure 1) has an input to receive a cable television 24 input signal. The home gateway system 20 is also connected by a wireless local loop 26 and a base station 28 to the public switch telephone network (PSTN) 30. The home gateway system 60 has a wireless local loop transceiver 62 (see Figure 2). A home automation controller 64 is capable of sending and receiving messages from the wireless local loop transceiver 62. A home security controller 66 is capable of sending and receiving messages from the wireless local loop transceiver 62. The PSTN 30 provides access to an internet service provider (ISP) 34, which provides access to the internet 36. A telephone 38, television 40, computer 42, printer 44 can all be connected to the home gateway system 20. In addition, appliances 46, lights 48 and sprinkling systems 50 can be connected to the home gateway system as part of the home automation features. A home security system 52 can also be connected to the home gateway system 20. This allows the home automation and security features to be integrated into the home communication system. For instance, the computer 42 can be used to setup times of day for the sprinkling system to turn on or the computer can print a report of the activities of the appliances or the security systems.

The transceiver 72 (see Figure 3) establishes a wireless local loop connection 74 with a base station 28. The transceiver 72 is connected to a switch 76. The switch 76 is connected to a voice bridge 77, a processor 78 and a router 80. The switch 76 also has a plurality of input lines 82. Telephones, facsimile machines and modems are among the devices that can be connected to the switch 76. The router 80 allows a user to establish a local area network within his home. The router 80 in this embodiment is connected to a television processing system 82 and a home automation and security system 84. The processor 78 is connected to a smart card interface 86. The smart card interface is used as a keyless entry and to store certain home automation setups. A voice processing system

88 is connected to the processor 78. The voice processing system 88 includes voice verification and speech recognition capabilities. The voice verification capability is used for remote access to the home automation and security system or is used for keyless entry. A caller identification system 90 is connected to the processor 78. The caller identification system 90 can be used as part of a remote access screening.

The voice processing system (see Figure 4) contains a speech recognition system 100, a speaker verification system 102, a speech synthesis system 104 and a voice mail memory system 106. The control of the systems of the voice processing system 88 is performed in one embodiment by the processor 78. The processor 78 coordinates the voice system 100-106 to provide machine reception for remote access to the home security system.

A request for access to a home automation and security features from a user at step 122 results in a speaker verification of the user at step 124. When the user is verified, the user is allowed access to the home automation and security features at step 126. At step 128, a voiced instruction is received.

In one embodiment, the step of receiving a request for access to the home automation and security features further includes inputting an electronic address of the home gateway system. Next, an electronic connection is established with the home gateway system. The user is then presented with a plurality of options including the home automation and security features. In one embodiment the step of entering the electronic address, is performed by dialing a phone number. In another embodiment the electronic connection is a wireless local loop telephony connection.

In yet another embodiment the electronic connection is an internet connection and the user clicks on the home automation and security features option. The internet connection can be carried over the wireless local loop or over the cable TV link.

In one embodiment the speaker verification step further includes requesting a user to speak an access code. The access code is recognized using speech recognition. When the access code is valid and belongs to a set of approved access codes, a speaker verification is performed. When the speaker verification fails, the user is requested to enter a personal identification number. When the personal identification is valid, the user is allowed access to the home automation and security features. When the personal

identification is not valid the user is denied access to the home automation and security features.

In a further embodiment the voiced instruction is recognized using the speech recognition system. The recognized instruction is converted into an electronic instruction that the home automation and security system can understand. The electronic instruction is then sent to the home automation and security controller.

The home security controller monitors a parameter at step 152. When the parameter exceeds a defined range, a message is sent containing an electronic address to a processor at step 154. A communication link to the electronic address is established over a wireless local loop at step 156. At step 158 the message is transmitted to the electronic address.

In one embodiment the parameter is a forceful entry signal and the message contains a police telephone number. In another embodiment a portion of the message is speech synthesized to form an audio message. The audio message is transmitted to the electronic address. For instances, the audio message could include the street address of house and which sensor was tripped. In addition, the message could tell the police if the owners are home.

In another embodiment the message includes an internet address of the police. A message is sent to a police computer and includes the street address of house and which sensor was tripped. In yet another embodiment the parameters monitored can be an appliance. The data points for the parameter can be sent over the internet to the owner at a remote location.

VI. Issues

1. Has the Examiner shown every element and connection in the cited references which is a minimum requirement for obviousness?
2. Do the teachings of the references cited by the Examiner suggest the claimed invention?

VII. Grouping Of Claims

- 1) Claims 1-3, 5-7 & 18 form a group.
- 2) Claims 4, 8-17 & 18-19 form a group.

VII. Argument

1. Has the Examiner shown every element and connection in the cited references which is a minimum requirement for obviousness?

Each and every element must be shown in the prior art references, *Richardson v. Suzuki Motor Co.*, 868F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989) and *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). Clearly if the prior art references do not show the claimed elements or the claimed elements are not inherent in the references, there has been no showing of obviousness.

The second group of claims all requires a speaker verification module. The Examiner points to the “speaker processor” element 58 of Launey et al (USPN 5,086,385). However, Launey only discusses “Voice Recognition” not speaker verification. Voice recognition is used to determine the words a user speaks. Speaker verification uses a person’s voice print to determine if they are an imposter or an authentic speaker. Clearly, the prior art references do not show the element of speaker verification.

The second group of claims also requires that the speech recognition and speaker verification features be accessible over the wireless local loop. Launey et al only show access to the speech recognition through the onsite microphone 64.

2. Do the teachings of the references cited by the Examiner suggest the claimed invention?

The teachings of the cited references under 35 USC 103 must suggest the claimed invention. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). The Examiner cites three main references, Gorman (USPN 6,141,356), Sizer, et al (USPN 6,021,324), and Launey et al (USPN 5,086,385). Gorman is directed to a system for distributing low speed POTS (Plain Old Telephone Service) signals and high speed data signals throughout a house or small business. (See Abstract) Gorman shows a wireless local loop system 30. Sizer, II et al. shows a system for controlling an appliance within a

premise. Launey et al shows a home automation system with a home controller and security features.

The combination of Sizer, II et al and Gorman does not suggest a home security controller. This element appears to be missing from both prior art references cited by the Examiner. There is a suggestion in Sizer, II, et al. for an automatic door lock, but this is not a home security controller. In addition, Sizer II, et al. does not have a separate home automation controller and home security controller as required by the first and second group of claims.

The combination of Launey et al and Gorman suggests a home automation system and a wireless local loop. Since Launey et al shows a telephone interface 60 and does not show that this is in anyway combined with the home automation features, the combination does not suggest combining the home automation features with telephony functions as required by the first and second group of claims. In addition, the second group of claims all requires a speaker verification module. The Examiner points to the "speaker processor" element 58 of Launey et al (USPN 5,086,385). However, Launey only discusses "Voice Recognition" not speaker verification. Voice recognition is used to determine the words a user speaks. Speaker verification uses a person's voice print to determine if they are an imposter or an authentic speaker. Clearly, the prior art references do not show the element of speaker verification.

The only way the Examiner can create the combination shown in the claims is to suggest that the applicants' invention was obvious to try, however this is impermissible see *Gillette Co. v. S.C. Johnson & Son*, 919 F.2d 7120, 16 USPQ2d 1923 (Fed. Cir. 1990). Both groups of claims are allowable over the prior art.

IX. Appendix Of The Appealed Claims

1. A home gateway system for home automation and security comprising:

a wireless local loop transceiver capable of establishing a wireless local loop point to point link to a geographically separated, non-mobile base station which is attached to the PSTN;

a home automation controller capable of sending and receiving a message with the wireless local loop transceiver; and

a home security controller capable of sending and receiving a message with the wireless local loop transceiver and the home automation controller.
2. The home gateway system of claim 1, further including a smart card interface capable of sending a plurality of instructions to the home automation controller.
3. The home gateway system of claim 1, further including a voice processing system coupled to the home security system.
4. The home gateway system of claim 3, wherein the voice processing system includes a speaker verification module.
5. The home gateway system of claim 3, wherein the voice processing system includes a speech recognition module.
6. The home gateway system of claim 1, further including a switch connecting the wireless local loop telephony connection to the home security controller.
7. The home gateway system of claim 1, further including a plurality of sensors connected to the home security controller.

8. A method of operating a home gateway system for home automation and security, comprising the steps of:

(a) receiving a request for access to a home automation and security features from a user through a wireless local loop point to point link from a geographically separated non-mobile base station which is attached to the PSTN;

(b) performing a speaker verification of the user;

(c) when the user is verified, allowing the user access to the home automation and security features; and

(d) receiving a voiced instruction.

9. The method of claim 8, wherein step (a) further includes the steps of:
- (a1) inputting an electronic address of the home gateway system by the user;
 - (a2) establishing an electronic connection with the home gateway system;
 - (a3) selecting the home automation and security features from a plurality of options.
10. The method of claim 9, wherein the step of inputting the electronic address includes the step of dialing a phone number.
11. The method of claim 9, wherein the step of establishing the electronic connection includes the step of setting up a wireless local loop telephony connection.
12. The method of claim 8, wherein step (b) further includes the steps of:
- (b1) requesting a user to speak an access code;
 - (b2) performing a speech recognition on the access code;
 - (b3) when the access code is recognized and belongs to a set of approved access codes, performing a speaker verification;

17. The method of claim 15, wherein step (d) further includes the step of:
- (d1) speech synthesizing a portion of the message to form an audio message;
 - (d2) transmitting the audio message to the electronic address.
18. A home gateway system for home automation and security comprising:
- a wireless local loop transceiver capable of establishing a wireless local loop point to point link to a geographically separated, non-mobile base station which is attached to the PSTN;
 - a switch connected to the wireless local loop transceiver;
 - a processor connected to the switch;
 - a voice processing system connected to the processor;
 - a router coupled to the switch;
 - a home automation controller connected to the router; and
 - a home security controller connected to the router.

13. The method of claim 12, further including the steps of:

(b4) when the speaker verification fails, requesting a user enter a personal identification number.

14. The method of claim 8, further including the steps of:

(e) performing a speech recognition of the voiced instruction;

(f) converting the voiced instruction into an electronic instruction;

(g) sending the electronic instruction to a home automation and security controller.

15. A method of operating a home gateway system for home automation and security, comprising the steps of:

(a) monitoring a parameter;

(b) when the parameter exceeds a defined range, sending a message containing an electronic address to a processor;

(c) establishing a communication link to the electronic address over a wireless local loop, wherein the wireless local loop point to point link is through a geographically separated non-mobile base station which is attached to the PSTN; and

(d) transmitting the message to the electronic address.

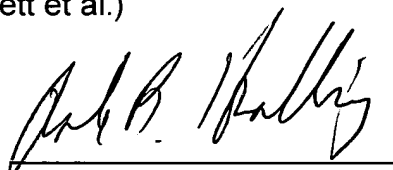
16. The method of claim 15, wherein step (b) further includes the step of:

(b1) when the parameter is a forceful entry signal, sending the message that contains a police telephone number to the processor.

19. A method of operating a home gateway system for home automation and security, comprising the steps of:

- (a) dialing a telephone number of the home gateway system by a user;
- (b) establishing a wireless local loop connection with the home gateway system;
- (c) selecting a home automation and security features from a plurality of options;
- (d) performing a speaker verification of the user;
- (e) when the user is verified, allowing the user access to the home automation and security features;
- (f) receiving a voiced instruction to setup a home security controller in a warning mode;
- (g) monitoring a forceful entry signal;
- (h) when the forceful entry signal exceeds a defined range, sending a message containing a police telephone number to a processor;
- (i) establishing a communication link to the police telephone number over a wireless local loop; and
- (j) transmitting the message to the police telephone number.

Respectfully submitted,
(Bennett et al.)

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